INDEX TO AUTHORS.

A

Avery, Oswald T., and **Heidelberger, Michael.** Immunological relationships of cell constituents of pneumococcus. II, 367

—, —, and **Goebel, Walther F.** The soluble specific substance of Friedländer's bacillus. II. Chemical and immunological relationships of Pneumococcus Type II and of a strain of Friedländer's bacillus, 709

— and **Morgan, Hugh J.** Immunological reactions of the isolated carbohydrate and protein of pneumococcus, 347

— and **Neill, James M.** The antigenic properties of solutions of pneumococcus, 355

—. See HEIDELBERGER, GOEBEL, and AVERY, 701, 727

B

Baker, Lillian E., and **Carrel, Alexis.** Lipoids as the growth-inhibiting factor in serum, 143

—. See DU NOÜY and BAKER, 9

Baudisch, Oskar. See WEBSTER and BAUDISCH, 473

Beck, Claude S., and **Holman, Emile.** The physiological response of the circulatory system to experimental alterations. II. The effect of variations in total blood volume, 681

—. See HOLMAN and BECK, 661

Bronfenbrenner, Jacques J., and **Korb, Charles.** Studies on the bacteriophage of d'Hérelle. II. Effect of alcohol on the bacteriophage of d'Hérelle, 419

— and —. III. Some of the factors determining the number and size of plaques of bacterial lysis on agar, 483

— and—. IV. Concerning the oneness of the bacteriophage, 821

Brown, Wade H., Pearce, Louise, and **Van Allen, Chester M.** Effects of obscure lesions on organ weights of apparently normal rabbits, 163

—, —, and —. Organ weights of normal rabbits, 69

Burrows, Montrose T., and **Johnston, Charles G.** An experimental study of the relation of the ovary to fat metabolism, 215

C

Carrel, Alexis. See BAKER and CARREL, 143

Chesney, Alan M., and **Kemp, Jarold E.** Studies in experimental syphilis. III. Further observations on the possibility of cure of syphilis in the rabbit with arsphenamine, 17

— and —. IV. The survival of *Treponema pallidum* in the internal organs of treated and untreated rabbits, 33

Clark, Harry, and **Sturm, Ernest.** The production of persistent alopecia in rabbits by x-rays of various degrees of hardness, 517

—. See HAWKINS and CLARK, 785

Cohn, Alfred E. Physiological ontogeny. A. Chicken embryos. V. On the rate of the heart beat during the development of chicken embryos, 291
—. VI. Differentiation in the chicken embryo heart from the point of view of stimulus production, 299
— and **Murray, Henry A., Jr.** Physiological ontogeny. A. Chicken embryos. IV. The negative acceleration of growth with age as demonstrated by tissue cultures, 275
Cole, Rufus, and **Kuttner, Ann G.** The problem of the etiology of herpes zoster, 799
Cowdry, E. V. Studies on the etiology of heartwater. I. Observation of a rickettsia, *Rickettsia ruminantium* (*n. sp.*), in the tissues of infected animals, 231
—. II. *Rickettsia ruminantium* (*n. sp.*) in the tissues of ticks transmitting the disease, 253
—. Studies on the etiology of jagziekte. I. The primary lesions, 323
—. II. Origin of the epithelial proliferations, and the subsequent changes, 335
Crawford, J. Hamilton, and **Hartley, J. N. J.** The histological changes in the thyroid gland of the rabbit following lobectomy, 193
— and —. The influence of the autonomic nervous system on the function of the thyroid gland, 179

E

Elman, Robert, and **McMaster, Philip D.** Studies on urobilin physiology and pathology. IV. Urobilin and the damaged liver, 99
— and —. V. The relation between urobilin and conditions involving increased red cell destruction, 619

F

Foshay, Lee. The relation of hyperglycemia to the relative blood volume, chlorine concentration, and chlorine distribution in the blood of dogs, 89

G

Goebel, Walther F. See AVERY, HEIDELBERGER and GOEBEL, 709
—. See HEIDELBERGER, GOEBEL, and AVERY, 701, 727
Goldblatt, Harry, and **Moritz, Alan R.** Experimental rickets in rabbits, 499
Goodell, Helen. See ZECKWER and GOODELL, 43, 57

H

Hartley, J. N. J. See CRAWFORD and HARTLEY, 179, 193
Hawkins, James A., and **Clark, Harry.** Skin reactions to alternate heat and x-ray exposures, 785
— and **Murphy, James B.** The effect of ethyl urethane anesthesia on the acid-base equilibrium and cell contents of the blood, 609
Hayman, J. M., Jr., and **Starr, Isaac, Jr.** Experiments on the glomerular distribution of blood in the mammalian kidney, 641
Heidelberger, Michael, Goebel, Walther F., and **Avery, Oswald T.** The soluble specific substance of pneumococcus. III, 727
—, —, and —. The soluble specific

substance of a strain of Friedlander's bacillus. I, 701
—. See AVERY and HEIDELBERGER, 367
—. See AVERY, HEIDELBERGER, and GOEBEL, 709
Holman, Emile, and **Beck, Claude S.** The physiological response of the circulatory system to experimental alterations. I. The effect of intracardiac fistulæ, 661
—. See BECK and HOLMAN, 681
Howe, Percy R. See WOLBACH and HOWE, 753

J

Jaffe, Henry L. See MARMORSTON-GOTTESMAN and JAFFE, 413
Johnston, Charles G. See BURROWS and JOHNSTON, 215
Jones, F. S., and **Little, Ralph B.** Specific infectious cystitis and pyelonephritis of cows, 593
Jorstad, Louis H. The relation of the vitamins to the reaction induced by coal tar in the tissues of animals, 221

K

Kasama, Y. See KAWAMURA and KASAMA, 793
Kawamura, R., and **Kasama, Y.** Studies on experimental rickets. I. The occurrence of rickets in young rabbits born of mothers infected with *Schistosomum japonicum*, 793
Keefer, Chester S. See PERLZWEIG and KEEFER, 747
Kemp, Jarold E. See CHESNEY and KEMP, 17, 33
Kitayama, K. See KOSHINA, SHIOZAWA, and KITAYAMA, 873
Korb, Charles C. See BRONFENBRENNER and KORB, 419, 483, 821
Koshina, M., Shiozawa, S., and **Kitayama, K.** Studies of *Leptospira hebdomadis*, 873
Kozlowski, Anthony. Comparative studies of the action on the pneumococcus of bile acids and unsaturated fatty acids, found in bile in the form of soaps, 453
Kubie, Lawrence S., and **Shults, Gertrude M.** Studies on the relationship of the chemical constituents of blood and cerebrospinal fluid, 565
Kuttner, Ann G. See COLE and KUTTNER, 799

L

Lancefield, Rebecca C. The immunological relationships of *Streptococcus viridans* and certain of its chemical fractions. I. Serological reactions obtained with antibacterial sera, 377
—. II. Serological reactions obtained with antinucleoprotein sera, 397
Landsteiner, K., and **Miller, C. Philip, Jr.** Serological studies on the blood of the primates. I. The differentiation of human and anthropoid bloods, 841
— and —. II. The blood groups in anthropoid apes, 853
— and —. III. Distribution of the serological factors related to human isoagglutinogens in the blood of lower monkeys, 863
— and **van der Scheer, James.** On the antigens of red blood corpuscles. II. Flocculation reactions with alcoholic extracts of erythrocytes, 123

Little, Ralph B. See JONES and LITTLE, 593
Lynch, Clara J. Studies on the relation between tumor susceptibility and heredity. II. The incidence of tar tumors in strains of mice having a differing incidence of spontaneous growths, 829

M

Mallory, Tracy B., and **Marble, Alexander.** Local immunization of rabbits to cutaneous infection with *Staphylococcus aureus*, 465
Marble, Alexander. See MALLORY and MARBLE, 465
Marmorston-Gottesman, J., and **Jaffe, Henry L.** Compensatory hypertrophy of the thymus gland in the rat, 413
McMaster, Philip D. See ELMAN and MCMASTER, 99, 619
Miller, A. James. The influence of high protein diet on the kidneys, 897
Miller, C. Philip, Jr. See LANDSTEINER and MILLER, 841, 853, 863
Miller, William Snow. The alveolar pores of pneumonia, 779
Mooser, H. Experimental studies with a spiral organism found in a wild rat and identical with the organism causing rat-bite fever. II, 539
Morgan, Hugh J. See AVERY and MORGAN, 347
Moritz, Alan R. See GOLDBLATT and MORITZ, 499
Murphy, James B., and **Sturm, Ernest.** Effect of prepuberty castration on subsequent cancer implantation, 155
— and —. Primary lung tumors in mice following the cutaneous application of coal tar, 693
Murphy, James B. See HAWKINS and MURPHY, 609
Murray, Henry A., Jr. See COHN and MURRAY, 275

N

Nakahara, Waro. The function of macrophages in local resistance to bacterial infections, 201
Neill, James M. See AVERY and NEILL, 355
du Noüy, P. Lecomte, and **Baker, Lillian E.** Surface tension of serum. XIV. Concerning the change in surface tension occurring as a result of immunization, 9

P

Pearce, Louise, and **Van Allen, Chester M.** The effect of operative interference with the cervical sympathetic nervous system upon the growth and malignancy of a transplantable neoplasm of the rabbit, 431
—. See BROWN, PEARCE, and VAN ALLEN, 69, 163
—. See RIVERS and PEARCE, 523
Perlzweig, William A., and **Keefer, Chester S.** The immunizing antigen of the pneumococcus. III. The purification of the water-soluble antigen, 747
Poole, Allan K. See CHESNEY and KEMP, 33

R

Rivers, Thomas M., and **Pearce, Louise.** Growth and persistence of filterable viruses in a transplantable rabbit neoplasm, 523
Rosenthal, Alma. See COHN and MURRAY, 275

S

Sanderson, Everett S. Bacteriophage tests on the meconium of aborted fetuses, 561

Shiozawa, S. See KOSHINA, SHIOZAWA, and KITAYAMA, 873

Shults, Gertrude M. See KUBIE and SHULTS, 565

Shwartzman, Gregory. Studies on regeneration of bacteriophage. I. The influence of partial anaerobiosis upon regeneration of a highly diluted lytic principle, 507

Starr, Isaac, Jr. See HAYMAN and STARR, 641

Steinberg, Bernhard. Drainage of the thoracic duct in experimental peritonitis, 83

Sturm, Ernest. See CLARK and STURM, 517

—. See MURPHY and STURM, 155, 693

T

Tamiya, Takeo. See ZINSSER and TAMIYA, 311

V

Van Allen, Chester M. See BROWN, PEARCE, and VAN ALLEN, 69, 163

—. See PEARCE and VAN ALLEN, 431

van der Scheer, James. See LANDSTEINER and VAN DER SCHEER, 123

W

Webster, Leslie T. Microbic virulence and host susceptibility in paratyphoid-enteritidis infection of white mice. VIII. The effect of selective breeding on host resistance. Further studies, 1

— and **Baudisch, Oskar.** Biology of *Bacterium lepisepticum*. II. The structure of some iron compounds which influence the growth of certain bacteria of the hemophilic, anaerobic, and hemorrhagic septicemia groups, 473

Wile, Edith L. See COHN, 291, 299

Wolbach, S. Burt, and **Howe, Percy R.** Tissue changes following deprivation of fat-soluble A vitamin, 753

Z

Zeckwer, Isolde T., and **Goodell, Helen.** Blood sugar studies. I. Rapid alterations in the blood sugar level of rabbits as result of intravenous injections of killed bacteria of various types, 43

— and —. II. Blood sugar changes in fatal bacterial anaphylaxis in the rabbit, 57

Zinsser, Hans, and **Tamiya, Takeo.** Studies on the antigenic substance of the bacterial cell, 311

INDEX TO SUBJECTS.

A

Abortion:
Fetus, meconium, bacteriophage test (SANDERSON) 561

Acid(s):
-base equilibrium of blood, effect of ethyl urethane anesthesia (HAWKINS and MURPHY) 609

Agar:
Bacterium, lysis (BRONFENBRENNER and KORB) 483

Age:
Chicken embryo tissue culture, negative acceleration of growth (COHN and MURRAY) 275

Alcohol:
Bacteriophage of d'Hérelle, effect (BRONFENBRENNER and KORB) 419
Erythrocyte, alcohol extract, flocculation (LANDSTEINER and VAN DER SCHEER) 123

Alopecia:
Roentgen radiation used to produce persistent (CLARK and STURM) 517

Alveolus:
Pores in pneumonia (MILLER) 779

Anaerobe:
Growth, structure of iron compounds influencing (WEBSTER and BAUDISCH) 473

Anaerobiosis:
Bacteriophage, influence on regeneration (SHWARTZMAN) 507

Anaphylaxis:
Bacterium, blood sugar (ZECKWER and GOODELL) 57

Anesthesia:
Ethyl urethane, effect on acid-base equilibrium of blood (HAWKINS and MURPHY) 609
— —, — — cell contents of blood (HAWKINS and MURPHY) 609

Anthropoid:
Blood, differentiation from human (LANDSTEINER and MILLER) 841
— groups (LANDSTEINER and MILLER) 853

Antigen:
Bacterial cell (ZINSSER and TAMIYA) 311
Erythrocyte. II (LANDSTEINER and VAN DER SCHEER) 123
Pneumococcus. III (PERLZWEIG and KEEFER) 747
— solutions (AVERY and NEILL) 355
—, water-soluble, purification (PERLZWEIG and KEEFER) 747

Ape:
Anthropoid, blood, differentiation from human (LANDSTEINER and MILLER) 841
—, — groups (LANDSTEINER and MILLER) 853

Arsphenamine:
Syphilis cured (CHESNEY and KEMP) 17

Aureus:
Staphylococcus, skin infection, immunization (MALLORY and MARBLE) 465
Autonomic:
Nervous system. *See* Nervous system.

B

Bacillus:
Friedländer's, and Pneumococcus Type II, chemical relations (AVERY, HEIDELBERGER, and GOEBEL) 709
—, — — — II, immunological relations (AVERY, HEIDELBERGER, and GOEBEL) 709
—, soluble specific substance. I (HEIDELBERGER, GOEBEL, and AVERY) 701
—, — — —. II (AVERY, (HEIDELBERGER, and GOEBEL) 709
Bacteriophage:
Meconium of aborted fetus (SANDERSON) 561
Regeneration. I (SHWARTZMAN) 507
—, influence of partial anaerobiosis (SHWARTZMAN) 507
Twort-d'Hérelle phenomenon. II (BRONFENBRENNER and KORB) 419
— —. III (BRONFENBRENNER and KORB) 483
— —. IV (BRONFENBRENNER and KORB) 821
— —, effect of alcohol (BRONFENBRENNER and KORB) 419
Bacterium:
Anaerobe, structure of iron compounds influencing growth (WEBSTER and BAUDISCH) 473
Bacterium—*continued.*
Anaphylaxis, blood sugar (ZECKWER and GOODELL) 57
Cell, antigenic substance (ZINSSER and TAMIYA) 311
Hemophilic, structure of iron compounds influencing growth (WEBSTER and BAUDISCH) 473
Hemorrhagic septicemia, structure of iron compounds influencing growth (WEBSTER and BAUDISCH) 473
Killed, blood sugar after intravenous injections (ZECKWER and GOODELL) 43
lepisepticum, biology. II (WEBSTER and BAUDISCH) 473
Lysis on agar (BRONFENBRENNER and KORB) 483
Macrophage in local resistance to infection (NAKAHARA) 201
Serum, antibacterial, serological reactions of *Streptococcus viridans* (LANCEFIELD) 377
Base:
Acid-, equilibrium of blood, effect of ethyl urethane anesthesia (HAWKINS and MURPHY) 609
Bile:
Fatty acids, unsaturated, in form of soaps, action on pneumococcus compared with bile acids (KOZLOWSKI) 453
Bile acid(s):
Pneumococcus, action, compared with unsaturated fatty acids in bile as soaps (KOZLOWSKI) 453
Biology:
Bacterium lepisepticum. II

Biology—*continued.*
(WEBSTER and BAUDISCH) 473
Blood:
Acid-base equilibrium, effect of ethyl urethane anesthesia (HAWKINS and MURPHY) 609
Anthropoid, blood groups (LANDSTEINER and MILLER) 853
— and human, differentiation (LANDSTEINER and MILLER) 841
Cell content, effect of ethyl urethane anesthesia (HAWKINS and MURPHY) 609
—, red. *See* Erythrocyte.
Cerebrospinal fluid and, relation of chemical constituents (KUBIE and SHULTS) 565
Chlorine concentration, relation to hyperglycemia (FOSHAY) 89
— distribution, relation to hyperglycemia (FOSHAY) 89
Corpuscle, red. *See* Erythrocyte.
Glomerulus, distribution in mammalian kidney (HAYMAN and STARR) 641
Monkey, lower, relation to human isoagglutinogens (LANDSTEINER and MILLER) 863
Primate, serology. I (LANDSTEINER and MILLER) 841
—, —. II (LANDSTEINER and MILLER) 853
—, —. III (LANDSTEINER and MILLER) 863
Sugar. I (ZECKWER and GOODELL) 43
—. II (ZECKWER and GOODELL) 57
Blood—*continued.*
Sugar after intravenous injections of killed bacteria (ZECKWER and GOODELL) 43
— in bacterial anaphylaxis (ZECKWER and GOODELL) 57
Volume, relation to hyperglycemia (FOSHAY) 89
—, variations, effect on circulatory system (BECK and HOLMAN) 681
Breeding:
Selective, effect on resistance to paratyphoid-enteritidis infection (WEBSTER) 1

C

Cancer:
See Carcinoma.
Carbohydrate:
Pneumococcus, immunological reactions (AVERY and MORGAN) 347
Carcinoma:
Castration, prepuberty, effect (MURPHY and STURM) 155
Castration:
Prepuberty, effect on cancer implantation (MURPHY and STURM) 155
Cattle:
Cystitis, infectious (JONES and LITTLE) 593
Pyelonephritis, infectious (JONES and LITTLE) 593
Cell:
Bacterium, antigenic substance (ZINSSER and TAMIYA) 311
Blood, content, effect of ethyl urethane anesthesia (HAWKINS and MURPHY) 609
—, red. *See* Erythrocyte.
Pneumococcus, constituents, immunological relations. II

Cell—*continued.*
(AVERY and HEIDELBERGER) 367
Cerebrospinal fluid:
See Fluid.
Cervical:
Sympathetic nervous system, operation, effect on transplantable rabbit tumor (PEARCE and VAN ALLEN) 431
Chicken:
Embryo. IV (COHN and MURRAY) 275
—. V (COHN) 291
—. VI (COHN) 299
— heart, beat during development (COHN) 291
— —, differentiation (COHN) 299
Chlorine:
Blood, concentration, relation to hyperglycemia (FOSHAY) 89
—, distribution, relation to hyperglycemia (FOSHAY) 89
Circulation:
Physiology. I (HOLMAN and BECK) 661
—. II (BECK and HOLMAN) 681
Coal tar:
Tissue reaction, relation of vitamins (JORSTAD) 221
Tumor (LYNCH) 829
—, primary, in lung after cutaneous application (MURPHY and STURM) 693
Corpuscle:
Blood, red. *See* Erythrocyte.
Cultivation:
Tissue, chicken embryo, negative acceleration of growth with age (COHN and MURRAY) 275
Cystitis:
Cattle, infectious (JONES and LITTLE) 593

D

Diet:
Protein, high, influence on kidneys (MILLER) 897
Duct:
Thoracic, drainage in peritonitis (STEINBERG) 83

E

Embryo:
Chicken. IV (COHN and MURRAY) 275
—. V (COHN) 291
—. VI (COHN) 299
—, heart, beat during development (COHN) 291
—, —, differentiation (COHN) 299
Enteritidis:
Paratyphoid-, infection, microbic virulence and host susceptibility. VIII (WEBSTER) 1
Epithelium: (*See also* Skin.)
Jagziekte, proliferation (COWDRY) 335
Equilibrium:
Acid-base, of blood, effect of ethyl urethane anesthesia (HAWKINS and MURPHY) 609
Erythrocyte:
Antigen. II (LANDSTEINER and VAN DER SCHEER) 123
Destruction, relation to urobilin (ELMAN and McMASTER) 619
Flocculation with alcohol extract (LANDSTEINER and VAN DER SCHEER) 123

Ethyl urethane:
Anesthesia, effect on acid-base equilibrium of blood (HAWKINS and MURPHY) 609
—, — — cell contents of blood (HAWKINS and MURPHY) 609
Etiology:
Heartwater. I (COWDRY) 231
—. II (COWDRY) 253
Herpes zoster (COLE and KUTTNER) 799
Jagziekte. I (COWDRY) 323
—. II (COWDRY) 335
Extraction:
Erythrocyte, flocculation with alcohol extract (LANDSTEINER and VAN DER SCHEER) 123

F

Fat:
Metabolism, relation of ovary (BURROWS and JOHNSTON) 215
-soluble A. *See* Vitamin A.
Fatty acid(s):
Bile, unsaturated, in form of soaps, action on pneumococcus compared with bile acids (KOZLOWSKI) 453
Fetus:
Aborted, meconium, bacteriophage test (SANDERSON) 561
Fever:
Rat-bite. *See* Rat-bite fever.
Filtration:
Virus, filterable, in transplantable rabbit tumor (RIVERS and PEARCE) 523
Fistula:
Intracardiac, effect on circulatory system (HOLMAN and BECK) 661
Flocculation:
Erythrocyte, alcohol extract (LANDSTEINER and VAN DER SCHEER) 123
Fluid:
Cerebrospinal, and blood, relation of chemical constituents (KUBIE and SHULTS) 565
Friedländer:
Bacillus. *See* Bacillus.

G

Gland:
Thymus. *See* Thymus.
Thyroid. *See* Thyroid.
Glomerulus:
Blood, distribution in mammalian kidney (HAYMAN and STARR) 641
Growth:
Anaerobe, structure of iron compounds influencing (WEBSTER and BAUDISCH) 473
Bacterium, hemophilic, structure of iron compounds influencing (WEBSTER and BAUDISCH) 473
—, hemorrhagic septicemia, structure of iron compounds influencing (WEBSTER and BAUDISCH) 473
Chicken embryo tissue culture, negative acceleration with age (COHN and MURRAY) 275
Serum lipoid as growth-inhibiting factor (BAKER and CARREL) 143
Tumor, transplantable, rabbit, effect of operation on cervical sympathetic nervous system (PEARCE and VAN ALLEN) 431
Virus, filterable, in transplantable rabbit tumor (RIVERS and PEARCE) 523

H

Heart:
Chicken embryo, differentiation (COHN) 299
——, heart beat during development (COHN) 291
Fistula, intracardiac, effect on circulatory system (HOLMAN and BECK) 661
Heartwater:
Etiology. I (COWDRY) 231
—. II (COWDRY) 253
Heat:
Skin reaction to alternate x-rays and (HAWKINS and CLARK) 785
Hebdomadis:
Leptospira (KOSHINA, SHIOZAWA, and KITAYAMA) 873
Hemophilic:
Bacterium, structure of iron compounds influencing growth (WEBSTER and BAUDISCH) 473
Hemorrhage:
Bacterium, hemorrhagic septicemia, structure of iron compounds influencing growth (WEBSTER and BAUDISCH) 473
Heredity:
Tumor susceptibility and. II (LYNCH) 829
d'Hérelle phenomenon:
See Twort-d'Hérelle phenomenon.
Herpes:
Zoster, etiology (COLE and KUTTNER) 799
Histology:
Thyroid after lobectomy (CRAWFORD and HARTLEY) 193
Hyperglycemia:
Blood chlorine concentration, relation (FOSHAY) 89
Hyperglycemia—*continued.*
Blood chlorine distribution, relation (FOSHAY) 89
— volume, relation (FOSHAY) 89
Hypertrophy:
Thymus, compensatory (MARMORSTON-GOTTESMAN and JAFFE) 413

I

Immunity:
Pneumococcus antigen. III (PERLZWEIG and KEEFER) 747
Serum, surface tension (DU NOÜY and BAKER) 9
Staphylococcus aureus cutaneous infection (MALLORY and MARBLE) 465
Immunology:
Pneumococcus carbohydrate (AVERY and MORGAN) 347
— cell constituents. II (AVERY and HEIDELBERGER) 367
— protein (AVERY and MORGAN) 347
— Type II and Friedländer's bacillus, relation (AVERY, HEIDELBERGER, and GOEBEL) 709
Streptococcus viridans and its chemical fractions. I (LANCEFIELD) 377
— — — its chemical fractions. II (LANCEFIELD) 397
Iron compounds:
Anaerobe, structure of iron compounds influencing growth (WEBSTER and BAUDISCH) 473
Bacterium, hemophilic, structure of iron compounds influencing growth (WEBSTER and BAUDISCH) 473

Iron compounds—*continued.*
Bacterium, hemorrhagic septicemia, structure of iron compounds influencing growth (WEBSTER and BAUDISCH) 473
Isoagglutinogen:
Human, relation to blood of lower monkeys (LANDSTEINER and MILLER) 863

J

Jagziekte:
Etiology. I (COWDRY) 323
—. II (COWDRY) 335
Japonicum:
Schistosomum, infection in mother followed by rickets in young (KAWAMURA and KASAMA) 793

K

Kidney:
Mammal, glomerular distribution of blood (HAYMAN and STARR) 641
Protein diet, high, influence (MILLER) 897

L

Lepisepticum:
Bacterium, biology. II (WEBSTER and BAUDISCH) 473
Leptospira:
hebdomadis (KOSHINA, SHIOZAWA, and KITAYAMA) 873
Lesion:
Jagziekte, primary (COWDRY) 323
Organ weight, effect of obscure (BROWN, PEARCE, and VAN ALLEN) 163
Lipoid:
Serum, as growth-inhibiting factor (BAKER and CARREL) 143
Liver:
Urobilin after injury (ELMAN and MCMASTER) 99
Lobectomy:
Thyroid, histology (CRAWFORD and HARTLEY) 193
Lungs:
Tumor, primary, after cutaneous application of coal tar (MURPHY and STURM) 693
Lysis:
Bacteriophage regeneration, influence of partial anaerobiosis (SHWARTZMAN) 507
Bacterium, on agar (BRONFENBRENNER and KORB) 483

M

Macrophage:
Bacterial infection, function in local resistance (NAKAHARA) 201
Malignancy:
Tumor, transplantable, rabbit, effect of operation on cervical sympathetic nervous system (PEARCE and VAN ALLEN) 431
Mammal:
Kidney, glomerular distribution of blood (HAYMAN and STARR) 641
Meconium:
Fetus, aborted, bacteriophage test (SANDERSON) 561
Metabolism:
Fat, relation of ovary (BURROWS and JOHNSTON) 215
Microbe:
Virulence and host susceptibility in paratyphoid-enteritidis infection. VIII (WEBSTER) 1
Monkey:
Blood, relation to human isoagglutinogens (LANDSTEINER and MILLER) 863

N

Nervous system:
Autonomic, influence on function of thyroid (CRAWFORD and HARTLEY) 179
Sympathetic, cervical, effect of operation on transplantable rabbit tumor (PEARCE and VAN ALLEN) 431

Nucleoprotein:
Serum, antinucleoprotein, serological reactions of *Streptococcus viridans* (LANCEFIELD) 397

O

Ontogeny:
Physiology. A. IV (COHN and MURRAY) 275
—. A. V (COHN) 291
—. A. VI (COHN) 299

Operation:
Nervous system, cervical sympathetic, effect on transplantable rabbit tumor (PEARCE and VAN ALLEN) 431

Organ:
Spirochæta pallida, survival after arsphenamine (CHESNEY and KEMP) 33
— —, — in untreated rabbits (CHESNEY and KEMP) 33
Weight, effect of obscure lesions (BROWN, PEARCE, and VAN ALLEN) 163
— of normal rabbits (BROWN, PEARCE, and VAN ALLEN) 69

Organism:
Rat-bite fever, identical with organism in wild rat. II (MOOSER) 539
Spiral, in wild rat, identical with organism causing rat-bite fever. II (MOOSER) 539

Ovary:
Metabolism, fat, relation (BURROWS and JOHNSTON) 215

P

Pallida:
Spirochæta, survival in internal organs after arsphenamine (CHESNEY and KEMP) 33
—, — — internal organs of untreated rabbits (CHESNEY and KEMP) 33

Pallidum:
Treponema. See Spirochæta pallida.

Paratyphoid:
-enteritidis infection, microbic virulence and host susceptibility. VIII (WEBSTER) 1

Pathology:
Urobilin. IV (ELMAN and MCMASTER) 99
—. V (ELMAN and MCMASTER) 619

Peritonitis:
Thoracic duct drainage (STEINBERG) 83

Physiology:
Circulation. I (HOLMAN and BECK) 661
—. II (BECK and HOLMAN) 681
Ontogeny. A. IV (COHN and MURRAY) 275
—. A. V (COHN) 291
—. A. VI (COHN) 299
Urobilin. IV (ELMAN and MCMASTER) 99
—. V (ELMAN and MCMASTER) 619

Pneumococcus:
Antigen. III (PERLZWEIG and KEEFER) 747
Antigenic properties of solutions (AVERY and NEILL) 355

5
50 / 7500
250

Pneumococcus—*continued.*
Bile acids and unsaturated fatty acids in bile as soaps, comparative action (KOZLOWSKI) 453
Carbohydrate, immunological reactions (AVERY and MORGAN) 347
Cell constituents, immunological relations. II (AVERY and HEIDELBERGER) 367
Protein, immunological reactions (AVERY and MORGAN) 347
Specificity of soluble substance. III (HEIDELBERGER, GOEBEL, and AVERY) 727
Type II and Friedländer's bacillus, chemical relations (AVERY, HEIDELBERGER, and GOEBEL) 709
— — — Friedländer's bacillus, immunological relations (AVERY, HEIDELBERGER, and GOEBEL) 709
Pneumonia:
Alveolar pores (MILLER) 779
Pore:
Alveolar, in pneumonia (MILLER) 779
Primate:
Blood, serology. I (LANDSTEINER and MILLER) 841
—, —. II (LANDSTEINER and MILLER) 853
—, —. III (LANDSTEINER and MILLER) 863
Proliferation:
Epithelium, in jagziekte (COWDRY) 335
Protein:
Diet, high, influence on kidneys (MILLER) 897
Pneumococcus, immunological reactions (AVERY and MORGAN) 347
Protein—*continued.*
reactions (AVERY and MORGAN) 347
Puberty:
Castration, prepuberty, effect on cancer implantation (MURPHY and STURM) 155
Pyelonephritis:
Cattle, infectious (JONES and LITTLE) 593

R

Rat:
Organism, spiral, identical with organism causing rat-bite fever. II (MOOSER) 539
Rat-bite fever:
Organism causing, identical with organism in wild rat. II (MOOSER) 539
Regeneration:
Bacteriophage. I (SHWARTZMAN) 507
—, influence of partial anaerobiosis (SHWARTZMAN) 507
Renal:
See Kidney.
Resistance:
Bacterial infection, function of macrophage (NAKAHARA) 201
Paratyphoid-enteritidis, effect of selective breeding (WEBSTER) 1
Rickets:
(GOLDBLATT and MORITZ) 499
I (KAWAMURA and KASAMA) 793
Schistosomum japonicum infection in mother followed in young by (KAWAMURA and KASAMA) 793
Rickettsia:
ruminantium in tissues of

Rickettsia—*continued.*
heartwater animals (COWDRY) 231
ruminantium in tissues of ticks transmitting heartwater (COWDRY) 253
Roentgen rays:
Alopecia, persistent, produced by (CLARK and STURM) 517
Skin reaction to alternate heat and (HAWKINS and CLARK) 785
Ruminantium:
Rickettsia, in tissues of heartwater animals (COWDRY) 231
—, — — — ticks transmitting heartwater (COWDRY) 253

S

Schistosomum:
japonicum infection in mother followed by rickets in young (KAWAMURA and KASAMA) 793
Septicemia:
Bacterium, hemorrhagic septicemia, structure of iron compounds influencing growth (WEBSTER and BAUDISCH) 473
Serology:
Blood of primates. I (LANDSTEINER and MILLER) 841
— — —. II (LANDSTEINER and MILLER) 853
— — —. III (LANDSTEINER and MILLER) 863
Isoagglutinogens, human, relation to blood of lower monkeys (LANDSTEINER and MILLER) 863
Streptococcus viridans, reactions with antibacterial sera (LANCEFIELD) 377
Serology—*continued.*
Streptococcus viridans, reactions with antinucleoprotein sera (LANCEFIELD) 397
Serum:
Antibacterial, serological reactions of *Streptococcus viridans* (LANCEFIELD) 377
Antinucleoprotein, serological reactions of *Streptococcus viridans* (LANCEFIELD) 397
Lipoid as growth-inhibiting factor (BAKER and CARREL) 143
Surface tension. XIV (DU NOÜY and BAKER) 9
Skin: (*See also* Epithelium.)
Reaction to alternate heat and x-rays (HAWKINS and CLARK) 785
Staphylococcus aureus infection, immunization (MALLORY and MARBLE) 465
Tumor, primary, in lung after cutaneous application of coal tar (MURPHY and STURM) 693
Soap(s):
Fatty acids, unsaturated, in bile, action on pneumococcus compared with bile acids (KOZLOWSKI) 453
Specificity:
Friedländer's bacillus, soluble substance. I (HEIDELBERGER, GOEBEL, and AVERY) 701
— —, — —. II (AVERY, HEIDELBERGER, and GOEBEL) 709
Pneumococcus soluble substance. III (HEIDELBERGER, GOEBEL, and AVERY) 727
Spirochæta:
pallida, survival in internal

Spirochæta—*continued.*
organs after arsphenamine (CHESNEY and KEMP) 33
—, — — internal organs of untreated rabbits (CHESNEY and KEMP) 33
Staphylococcus:
aureus, skin infection, immunization (MALLORY and MARBLE) 465
Streptococcus:
viridans, and its chemical fractions, immunological relations. I (LANCEFIELD) 377
—, — — chemical fractions, immunological relations. II (LANCEFIELD) 397
Sugar:
Blood. I (ZECKWER and GOODELL) 43
—. II (ZECKWER and GOODELL) 57
— after intravenous injections of killed bacteria (ZECKWER and GOODELL) 43
—, in bacterial anaphylaxis (ZECKWER and GOODELL) 57
Susceptibility:
Host, and microbic virulence in paratyphoid-enteritidis infection. VIII (WEBSTER) 1
Tumor, relation to heredity. II (LYNCH) 829
Sympathetic:
Nervous system. See Nervous system.
Syphilis:
III (CHESNEY and KEMP) 17
IV (CHESNEY and KEMP) 33
Arsphenamine for cure (CHESNEY and KEMP) 17

T

Tension:
Surface, of serum. XIV (DU NOÜY and BAKER) 9
—, — —, after immunization (DU NOÜY and BAKER) 9
Thoracic duct:
See Duct.
Thymus:
Hypertrophy, compensatory (MARMORSTON-GOTTESMAN and JAFFE) 413
Thyroid:
Autonomic nervous system, influence on function (CRAWFORD and HARTLEY) 179
Lobectomy, histology (CRAWFORD and HARTLEY) 193
Tick:
Heartwater, *Rickettsia ruminantium* in tissues (COWDRY) 253
Tissue:
Chicken embryo culture, negative acceleration of growth with age (COHN and MURRAY) 275
Coal tar, reaction, relation of vitamins (JORSTAD) 221
Heartwater, *Rickettsia ruminantium* in (COWDRY) 231
Tick transmitting heartwater, *Rickettsia ruminantium* in (COWDRY) 253
Vitamin A (fat-soluble), tissue changes after deprivation (WOLBACH and HOWE) 753
Transmission:
Heartwater, *Rickettsia ruminantium* in tissues of ticks (COWDRY) 253

Transplantation:
Tumor, rabbit, effect of operation on cervical sympathetic nervous system (PEARCE and VAN ALLEN) 431
—, —, filterable virus in (RIVERS and PEARCE) 523

Treponema:
pallidum. *See Spirochæta pallida*.

Tumor:
Coal tar-induced (LYNCH) 829
Lung, primary, after cutaneous application of coal tar (MURPHY and STURM) 693
Spontaneous (LYNCH) 829
Susceptibility, relation to heredity. II (LYNCH) 829
Transplantable, rabbit, effect of operation on cervical sympathetic nervous system (PEARCE and VAN ALLEN) 431
—, —, filterable virus in (RIVERS and PEARCE) 523

Twort-d'Hérelle phenomenon:
Bacteriophage. II (BRONFENBRENNER and KORB) 419
—. III (BRONFENBRENNER and KORB) 483
—. IV (BRONFENBRENNER and KORB) 821
—, effect of alcohol (BRONFENBRENNER and KORB) 419

U

Urobilin:
Erythrocyte destruction, relation (ELMAN and MCMASTER) 619
Liver, damaged (ELMAN and MCMASTER) 99
Pathology. IV (ELMAN and MCMASTER) 99
—. V (ELMAN and MCMASTER) 619
Physiology. IV (ELMAN and MCMASTER) 99
—. V (ELMAN and MCMASTER) 619

V

Viridans:
Streptococcus, and its chemical fractions, immunological relations. I (LANCEFIELD) 377
—, — — chemical fractions, immunological relations. II (LANCEFIELD) 397

Virulence:
Microbic, and host susceptibility in paratyphoid-enteritidis infection. VIII (WEBSTER) 1

Virus:
Filterable, in transplantable rabbit tumor (RIVERS and PEARCE) 523

Vitamin(s):
A (fat-soluble), tissue changes after deprivation (WOLBACH and HOWE) 753
Tissue reaction from coal tar, relation (JORSTAD) 221

X

X-rays:
See Roentgen rays.

Z

Zoster:
See Herpes.